

# COMPONENTS GUIDE

SMARTRACK® GLOBAL



# contents

- 4 Kits
- 6 Subscriptions
- 7 Diagram
- 8 Controllers
- 10 Displays
- 12 RAM Mounting
- 13 Accessories
- 14 Harnesses

# Kits



## 4G / RFID Card Reader Kits

| BASE KIT - Consists of |       |                                       | ** not included in VDI Loom kit |       |                                |
|------------------------|-------|---------------------------------------|---------------------------------|-------|--------------------------------|
| 1                      | 16423 | Controller Fleet SmarTrack® Global 4G | 1                               | 8460  | Ram Double Socket Arm 3"       |
| 1                      | 15913 | Display SmarTrack® Global RFID        | 1                               | 8492  | Ram Base 2 1/2" Diameter Base  |
| 1                      | 10284 | Dual Antenna GSM and GPS              | 1                               | 2600  | Switch Head Key Stay Put L/H** |
| 2                      | 15919 | RFID Operator Card                    | 1                               | 9476  | Body With 1xN/O Contact**      |
| 1                      | 17288 | Sensor Impact SmarTrack®              | 1                               | 10977 | Label Bypass SmarTrack***      |

| 3M <sup>DISPLAY</sup> CABLE |       |                             |                 |       |                                    |
|-----------------------------|-------|-----------------------------|-----------------|-------|------------------------------------|
| WITH STANDARD LOOM          |       |                             | WITH SHORT LOOM |       |                                    |
| 15887                       |       |                             | 16027           |       |                                    |
| 1                           | -     | Base Kit                    | 1               | -     | Base Kit                           |
| 1                           | 11265 | Loom SmarTrack® Global      | 1               | 16623 | Loom SmarTrack® Generic 1.4m G5 V2 |
| 1                           | 15266 | Cable SmarTrack® Display 3m | 1               | 15266 | Cable SmarTrack® Display 3m        |

| 5M <sup>DISPLAY</sup> CABLE |       |                             |                 |       |                                    |
|-----------------------------|-------|-----------------------------|-----------------|-------|------------------------------------|
| WITH STANDARD LOOM          |       |                             | WITH SHORT LOOM |       |                                    |
| 15889                       |       |                             | 15890           |       |                                    |
| 1                           | -     | Base Kit                    | 1               | -     | Base Kit                           |
| 1                           | 11265 | Loom SmarTrack® Global      | 1               | 16623 | Loom SmarTrack® Generic 1.4m G5 V2 |
| 1                           | 15267 | Cable SmarTrack® Display 5m | 1               | 15267 | Cable SmarTrack® Display 5m        |

## 4G / HID Card Reader Kits

| BASE KIT - Consists of |       |                                       | ** not included in VDI Loom kit |       |                                |
|------------------------|-------|---------------------------------------|---------------------------------|-------|--------------------------------|
| 1                      | 16423 | Controller Fleet SmarTrack® Global 4G | 1                               | 8492  | Ram Base 2 1/2" Diameter Base  |
| 1                      | 15901 | Display SmarTrack® Global HID         | 1                               | 2600  | Switch Head Key Stay Put L/H** |
| 1                      | 10284 | Dual Antenna GSM and GPS              | 1                               | 9476  | Body With 1xN/O Contact**      |
| 1                      | 17288 | Sensor Impact SmarTrack®              | 1                               | 10977 | Label Bypass SmarTrack***      |
| 1                      | 8460  | Ram Double Socket Arm 3"              |                                 |       |                                |

| 3M <sup>DISPLAY</sup> CABLE |       |                             |                 |       |                                    |
|-----------------------------|-------|-----------------------------|-----------------|-------|------------------------------------|
| WITH STANDARD LOOM          |       |                             | WITH SHORT LOOM |       |                                    |
| 11517                       |       |                             | 15351           |       |                                    |
| 1                           | -     | Base Kit                    | 1               | -     | Base Kit                           |
| 1                           | 11265 | Loom SmarTrack® Global      | 1               | 16623 | Loom SmarTrack® Generic 1.4m G5 V2 |
| 1                           | 15266 | Cable SmarTrack® Display 3m | 1               | 15266 | Cable SmarTrack® Display 3m        |

| 5M <sup>DISPLAY</sup> CABLE |       |                             |                 |       |                                    |
|-----------------------------|-------|-----------------------------|-----------------|-------|------------------------------------|
| WITH STANDARD LOOM          |       |                             | WITH SHORT LOOM |       |                                    |
| 15615                       |       |                             | 15616           |       |                                    |
| 1                           | -     | Base Kit                    | 1               | -     | Base Kit                           |
| 1                           | 11265 | Loom SmarTrack® Global      | 1               | 16623 | Loom SmarTrack® Generic 1.4m G5 V2 |
| 1                           | 15267 | Cable SmarTrack® Display 5m | 1               | 15267 | Cable SmarTrack® Display 5m        |

## WIFI / RFID Card Reader Kits

| BASE KIT - Consists of |       |                                         | ** not included in VDI Loom kit |       |                                |
|------------------------|-------|-----------------------------------------|---------------------------------|-------|--------------------------------|
| 1                      | 16424 | Controller Fleet SmarTrack® Global WiFi | 1                               | 8460  | Ram Double Socket Arm 3"       |
| 1                      | 15913 | Display SmarTrack® Global RFID          | 1                               | 8492  | Ram Base 2 1/2" Diameter Base  |
| 1                      | 15905 | Antenna Dual Band WiFi and GPS          | 1                               | 2600  | Switch Head Key Stay Put L/H** |
| 2                      | 15919 | RFID Operator Card                      | 1                               | 9476  | Body With 1xN/O Contact**      |
| 1                      | 17288 | Sensor Impact SmarTrack®                | 1                               | 10977 | Label Bypass SmarTrack***      |
| 1                      | 4723  | Antenna Mount                           |                                 |       |                                |

| 3M <sup>DISPLAY</sup> CABLE |       |                             |                 |       |                                    |
|-----------------------------|-------|-----------------------------|-----------------|-------|------------------------------------|
| WITH STANDARD LOOM          |       |                             | WITH SHORT LOOM |       |                                    |
| 15891                       |       |                             | 15892           |       |                                    |
| 1                           | -     | Base Kit                    | 1               | -     | Base Kit                           |
| 1                           | 11265 | Loom SmarTrack® Global      | 1               | 16623 | Loom SmarTrack® Generic 1.4m G5 V2 |
| 1                           | 15266 | Cable SmarTrack® Display 3m | 1               | 15266 | Cable SmarTrack® Display 3m        |

| 5M <sup>DISPLAY</sup> CABLE |       |                             |                 |       |                                    |
|-----------------------------|-------|-----------------------------|-----------------|-------|------------------------------------|
| WITH STANDARD LOOM          |       |                             | WITH SHORT LOOM |       |                                    |
| 15893                       |       |                             | 15894           |       |                                    |
| 1                           | -     | Base Kit                    | 1               | -     | Base Kit                           |
| 1                           | 11265 | Loom SmarTrack® Global      | 1               | 16623 | Loom SmarTrack® Generic 1.4m G5 V2 |
| 1                           | 15267 | Cable SmarTrack® Display 5m | 1               | 15267 | Cable SmarTrack® Display 5m        |

## WIFI / HID Card Reader Kits

| BASE KIT - Consists of |       |                                         | ** not included in VDI Loom kit |       |                                |
|------------------------|-------|-----------------------------------------|---------------------------------|-------|--------------------------------|
| 1                      | 16424 | Controller Fleet SmarTrack® Global WiFi | 1                               | 8492  | Ram Base 2 1/2" Diameter Base  |
| 1                      | 15901 | Display SmarTrack® Global HID           | 1                               | 2600  | Switch Head Key Stay Put L/H** |
| 1                      | 15905 | Antenna Dual Band WiFi and GPS          | 1                               | 9476  | Body With 1xN/O Contact**      |
| 1                      | 17288 | Sensor Impact SmarTrack®                | 1                               | 10977 | Label Bypass SmarTrack***      |
| 1                      | 8460  | Ram Double Socket Arm 3"                | 1                               | 4723  | Antenna Mount                  |

| 3M <sup>DISPLAY</sup> CABLE |       |                             |                 |       |                                    |
|-----------------------------|-------|-----------------------------|-----------------|-------|------------------------------------|
| WITH STANDARD LOOM          |       |                             | WITH SHORT LOOM |       |                                    |
| 15895                       |       |                             | 15896           |       |                                    |
| 1                           | -     | Base Kit                    | 1               | -     | Base Kit                           |
| 1                           | 11265 | Loom SmarTrack® Global      | 1               | 16623 | Loom SmarTrack® Generic 1.4m G5 V2 |
| 1                           | 15266 | Cable SmarTrack® Display 3m | 1               | 15266 | Cable SmarTrack® Display 3m        |

| 5M <sup>DISPLAY</sup> CABLE |       |                             |                 |       |                                    |
|-----------------------------|-------|-----------------------------|-----------------|-------|------------------------------------|
| WITH STANDARD LOOM          |       |                             | WITH SHORT LOOM |       |                                    |
| 15897                       |       |                             | 15898           |       |                                    |
| 1                           | -     | Base Kit                    | 1               | -     | Base Kit                           |
| 1                           | 11265 | Loom SmarTrack® Global      | 1               | 16623 | Loom SmarTrack® Generic 1.4m G5 V2 |
| 1                           | 15267 | Cable SmarTrack® Display 5m | 1               | 15267 | Cable SmarTrack® Display 5m        |

# Subscriptions

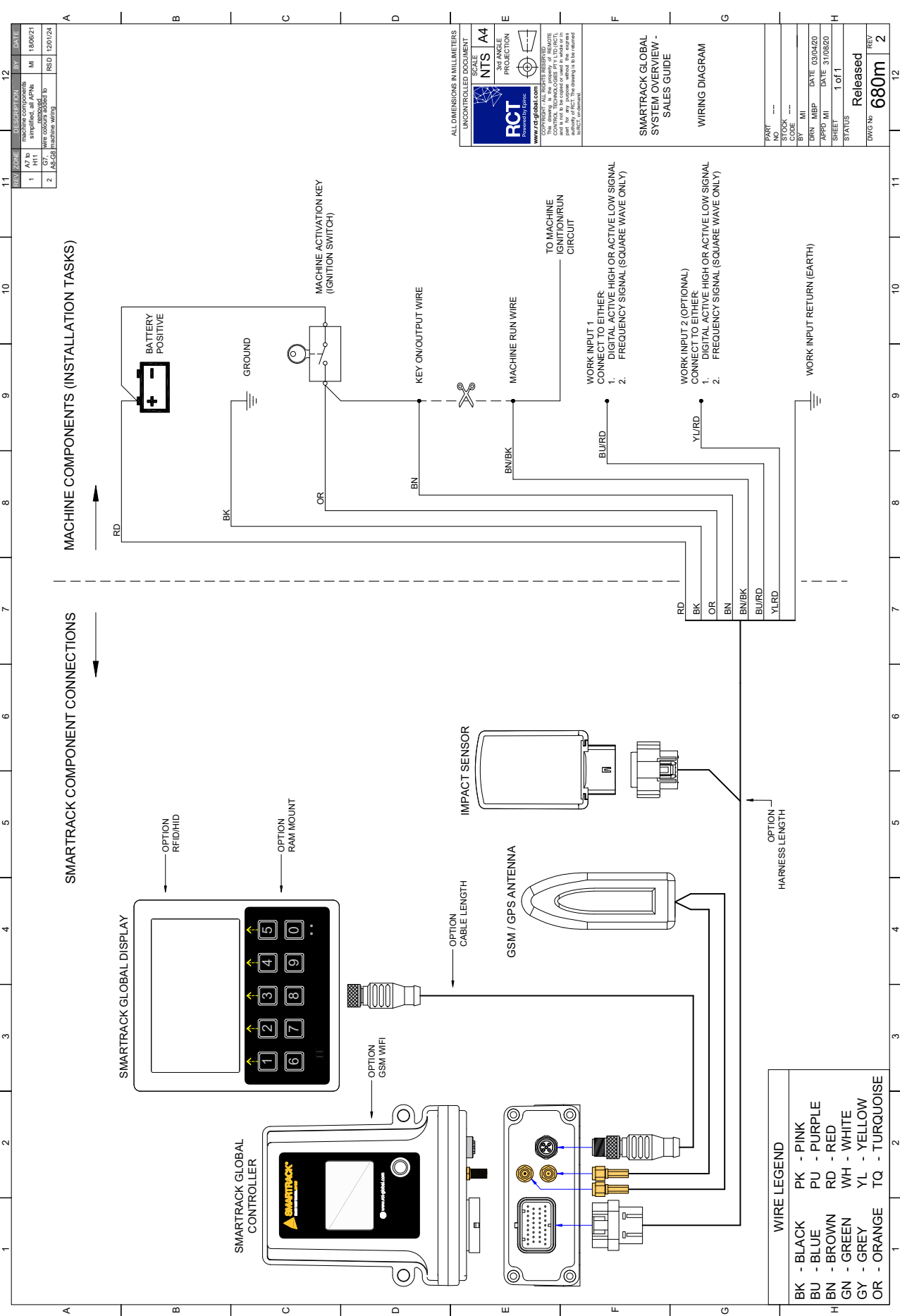
Please visit the coverage map on the RCT web site to confirm the coverage in your region;

[rct-global.com/coverage](http://rct-global.com/coverage)

|       |                                                                       |
|-------|-----------------------------------------------------------------------|
| 12131 | Support/Access 1yr SmarTrack (Website Access and Support for 1 Year)  |
| 12422 | Support/Access 2yr SmarTrack (Website Access and Support for 2 Years) |
| 12423 | Support/Access 3yr SmarTrack (Website Access and Support for 3 Years) |
| 12424 | Support/Access 4yr SmarTrack (Website Access and Support for 4 Years) |
| 12130 | Support/Access 5yr SmarTrack (Website Access and Support for 5 Years) |



# Diagram



# Controllers



## SmarTrack® Global Fleet Controller PN 16423

### Mechanical and Environmental

|                      |                                                |
|----------------------|------------------------------------------------|
| Dimensions:          | Height: 138.5mm   Width: 116mm   Depth: 48.5mm |
| Weight:              | 300 g                                          |
| Ambient Temperature: | -30 to +60° C                                  |
| Humidity:            | 0 to 95% non-condensing relative humidity      |
| Altitude:            | -1000 to 3000 metres MASL                      |
| Shock Impact:        | 7 g, 1 ms non-repetitive                       |
| Vibration Rating:    | 0.5 g to 500 Hz                                |
| IP Rating:           | IP65                                           |

### Power Conditioning

|                        |            |
|------------------------|------------|
| Operational Supply:    | 12 to 48 V |
| Maximum Input Voltage: | 60 V       |
| Maximum Current:       | 6 A        |
| Quiescent Current:     | 5 mA       |

### Inputs

|                        |                                                                   |
|------------------------|-------------------------------------------------------------------|
| Input Channels:        | 9                                                                 |
| Input Impedance:       | 85 K Ohms                                                         |
| Digital Inputs:        | 4 V switching threshold (1.5 V inputs 3 and 4), protected to 60 V |
| Analogue Inputs:       | 0 to 10 V, protected to 60 V                                      |
| Frequency Inputs:      | Up to 10 KHz, 1.5 V threshold (option for 4 V threshold)          |
| Pull up and Pull down: | 12 V, 5 mA max                                                    |

### Outputs

|                            |                  |
|----------------------------|------------------|
| Number of Output Channels: | 8                |
| Digital Output:            | 12 V, 200 mA max |
| Combined Output Current:   | 1 A max          |

### Communications

|       |     |
|-------|-----|
| Type: | LTE |
|-------|-----|

### Antenna

|            |                       |
|------------|-----------------------|
| Impedance: | 50 Ohms               |
| Cellular:  | RP-SMA Female         |
| GPS:       | SMA Female, 3.3 V LNA |



## SmarTrack® Global Fleet Controller WiFi PN 15847

### Region

Europe and China

### Mechanical and Environmental

|                      |                                                |
|----------------------|------------------------------------------------|
| Dimensions:          | Height: 138.5mm   Width: 116mm   Depth: 48.5mm |
| Weight:              | 300 g                                          |
| Ambient Temperature: | -25 to +85° C                                  |
| Humidity:            | 0 to 95% non-condensing relative humidity      |
| Altitude:            | -1000 to 3000 metres MASL                      |
| Shock Impact:        | 7 g, 1 ms non-repetitive                       |
| Vibration Rating:    | 0.5 g to 500 Hz                                |
| IP Rating:           | IP65                                           |

### Power Conditioning

|                        |            |
|------------------------|------------|
| Operational Supply:    | 12 to 48 V |
| Maximum Input Voltage: | 60 V       |
| Maximum Current:       | 6 A        |
| Quiescent Current:     | 5 mA       |

### Inputs

|                        |                                                                     |
|------------------------|---------------------------------------------------------------------|
| Input Channels:        | 8                                                                   |
| Input Impedance:       | 100 K Ohms                                                          |
| DC Measurement:        | 24 V, 4 V switching threshold, 33 V max. (100 V protection Input 8) |
| AC Measurement:        | 0 to 10 V, 33 V max. (60 V protection on Input 7)                   |
| Frequency Measurement: | 10 to 5000 Hz                                                       |
| Pull up and Pull down: | 12 V, 5 mA max                                                      |

### Outputs

|                            |                  |
|----------------------------|------------------|
| Number of Output Channels: | 8                |
| Digital Output:            | 12 V, 400 mA max |
| Combined Output Current:   | 1 A max          |

### Communications

|       |            |
|-------|------------|
| Type: | WiFi Modem |
|-------|------------|

### Antenna

|            |                       |
|------------|-----------------------|
| Impedance: | 50 Ohms               |
| Cellular:  | RP-SMA Female         |
| GPS:       | SMA Female, 3.3 V LNA |

# Displays



## SmarTrack® Global Display with RFID Reader PN 15913

### Mechanical and Environmental

|                      |                                                                           |
|----------------------|---------------------------------------------------------------------------|
| Dimensions:          | Height: 131mm   Width: 122mm   Depth: 39.5mm                              |
| Weight:              | 450 g                                                                     |
| Ambient Temperature: | -20 to +65° C                                                             |
| IP Rating:           | IP65                                                                      |
| Enclosure Materials: | Polycarbonate: +PET Blend, Polycarbonate: Nylon                           |
| Enclosure Colour:    | Grey                                                                      |
| Mounting:            | Mount type: RAM Mount Ball   Ball Size: B Size 1"   Ball Material: Rubber |

### Power Conditioning

|                     |     |
|---------------------|-----|
| Operational Supply: | 9 V |
| Maximum Power:      | 5 W |

### Keypad

|                 |                  |
|-----------------|------------------|
| Number of keys: | 10x tactile dome |
|-----------------|------------------|

### Card Reader

|                     |                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency:          | 13.56 MHz                                                                                                                                                                                                                                                                                                                                                                                       |
| Card Compatibility: | 15913 RFID Display uses a generic card reader to read ISO1443A card serial numbers. Generic RFID cards will typically not have a serial number printed on the card, you must read the access code using the SmarTrack® Card Assistant. SmarTrack® RFID cards and wrist bands will have the access code printed on them. Refer to the SmarTrack® RFID Card Compatibility chart for tested cards. |

### Audio

|                                            |                                                        |
|--------------------------------------------|--------------------------------------------------------|
| Type:                                      | Single tone piezo electric                             |
| Frequency:                                 | Minimum: 2300 Hz   Typical: 2800 Hz   Maximum: 3300 Hz |
| Typical Sound Pressure Level (SPL) Rating: | 85 dB @ 1 m                                            |

### Display

|                |                                          |
|----------------|------------------------------------------|
| Type:          | Colour LCD TFT 4.3" (109 mm)             |
| Resolution:    | 480 x 272 (WQVGA)                        |
| Brightness:    | 1000 cd/m2 (dimnable)                    |
| Viewing Angle: | 55° top, 75° bottom, 75° left, 75° right |

### Status Indicator

|         |                                    |
|---------|------------------------------------|
| Power:  | Bi-Colour LED, Red / Green         |
| Status: | Tri-Colour LED, Red / Green / Blue |



## SmarTrack® Global Display with HID Reader PN 15901

### Mechanical and Environmental

|                      |                                                                           |
|----------------------|---------------------------------------------------------------------------|
| Dimensions:          | Height: 131mm   Width: 122mm   Depth: 39.5mm                              |
| Weight:              | 450 g                                                                     |
| Ambient Temperature: | -20 to +65° C                                                             |
| IP Rating:           | IP65                                                                      |
| Enclosure Materials: | Polycarbonate: +PET Blend, Polycarbonate: Nylon                           |
| Enclosure Colour:    | Grey                                                                      |
| Mounting:            | Mount type: RAM Mount Ball   Ball Size: B Size 1"   Ball Material: Rubber |

### Power Conditioning

|                     |     |
|---------------------|-----|
| Operational Supply: | 9 V |
| Maximum Power:      | 5 W |

### Keypad

|                         |                  |
|-------------------------|------------------|
| Number of keys:         | 10x tactile dome |
| Backlit Keys:           | Yes              |
| Light Sensor Installed: | Yes              |

### Card Reader

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency:          | 13.56 MHz / 125kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Card Compatibility: | 15901 HID Display uses a HID proprietary card reader allowing higher RFID card compatibility such as HID proprietary cards and generic ISO 14443 A/B, ISO 15693 cards. It can also read RFID proximity cards to read the card serial number off non-proprietary HID cards. HID cards may have a number printed on the card that is not necessarily the serial number (access code), you must read the access code using the SmarTrack® Card Assistant. HID Prox 125kHz cards will typically have the access code printed on them. |

### Audio

|                                            |                                                        |
|--------------------------------------------|--------------------------------------------------------|
| Type:                                      | Single tone piezo electric                             |
| Frequency:                                 | Minimum: 2300 Hz   Typical: 2800 Hz   Maximum: 3300 Hz |
| Typical Sound Pressure Level (SPL) Rating: | 60 dB @ 30 cm                                          |

### Display

|                |                                          |
|----------------|------------------------------------------|
| Type:          | Colour LCD TFT 4.3" (109 mm)             |
| Resolution:    | 480 x 272 (WQVGA)                        |
| Brightness:    | 1000 cd/m2 (dimnable)                    |
| Viewing Angle: | 55° top, 75° bottom, 75° left, 75° right |

### Status Indicator

|          |                                                  |
|----------|--------------------------------------------------|
| Power:   | Bi-Colour LED, Red / Green                       |
| Status:  | Tri-Colour LED, Red / Green / Blue               |
| Feature: | Display screen and keypad auto dim / bright mode |

# RAM Mounting

SmarTrack® Global have a RAM mounting solution to suit most applications.  
Check out the huge range of options.

|                                                                                                                                                                 |                                                                                                                                     |                                                                                                                                 |                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                 | <br><b>8464</b><br>RAM Double Socket Arm<br>1 3/4" | <br><b>8460</b><br>RAM Double Socket Arm<br>3" | <br><b>8799</b><br>RAM Double Socket Arm<br>6" |
| <br><b>8795</b><br>RAM Base Kit to<br>suit Maxi Vision®<br>5" & 7" Monitors    | <br><b>8795 + 8464</b>                             | <br><b>8795 + 8460</b>                         | <br><b>8795 + 8799</b>                         |
| <br><b>8494</b><br>RAM Base Double<br>U-Bolt for Rails to<br>1.25" in Diameter | <br><b>8494 + 8464</b>                             | <br><b>8494 + 8460</b>                         | <br><b>8494 + 8799</b>                         |
| <br><b>9292</b><br>RAM Base 3"<br>Clamp                                       | <br><b>9292 + 8464</b>                            | <br><b>9292 + 8460</b>                        | <br><b>9292 + 8799</b>                        |
| <br><b>8455</b><br>RAM Base<br>1/4"-20 UNC<br>Female Thread<br>with Hex      | <br><b>8455 + 8464</b>                           | <br><b>8455 + 8460</b>                       | <br><b>8455 + 8799</b>                       |
| <br><b>8493</b><br>RAM Base 2" x 3"<br>Universal<br>Rectangular              | <br><b>8493 + 8464</b>                           | <br><b>8493 + 8460</b>                       | <br><b>8493 + 8799</b>                       |
| <br><b>8798</b><br>RAM Base<br>2" x 6" Universal<br>Rectangular              | <br><b>8798 + 8464</b>                           | <br><b>8798 + 8460</b>                       | <br><b>8798 + 8799</b>                       |
| <br><b>8492</b><br>RAM Base 2.5"<br>Diameter Round                           | <br><b>8492 + 8464</b>                           | <br><b>8492 + 8460</b>                       | <br><b>8492 + 8799</b>                       |
| <br><b>15475</b><br>RAM Base<br>Diamond                                      | <br><b>15475 + 8464</b>                          | <br><b>15475 + 8460</b>                      | <br><b>15475 + 8799</b>                      |

# Accessories

|                                                                                                                                                 |                                                                                                                                                                                 |                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>SmarTrack® Operator Card<br>PN 15919                     | <br>SmarTrack® Operator Wristband<br>PN 16094                                                | <br>Operator Card Lanyard<br>PN 16095                         |
| <br>Operator Card<br>Retractable Lanyard<br>PN 16096         | <br>Sensor Impact SmarTrack®<br>PN 17288                                                     | <br>Adhesive Mount to suit<br>17288 Impact Sensor<br>PN 13739 |
| <br>Kit SmarTrack® Global Weight<br>PN 15917                 | <br>Dual Antenna GSM & GPS<br>PN 10284                                                       | <br>Antenna Dual Band<br>WIFI & GPS<br>PN 15905               |
| <br>Relay<br>PN 9029                                       | <br>Hi-Gain Ground Independent<br>Antenna (suits battery electric<br>machines)<br>PN 16098 | <br>Antenna Mount to suit<br>15905, 16098<br>PN 4723        |
| <br>Finger Wrench<br>to suit SMA Connectors<br>PN 10472    | <br>Kit Bypass Switch<br>PN 15798                                                          | <br>Label Bypass SmarTrack®<br>PN 10977                     |
| <br>Operator Access Card<br>(HIDprox)(HID only)<br>PN 6826 |                                                                                                                                                                                 |                                                                                                                                                  |

# Harnesses



Loom Universal SmarTrack® Global Standard  
PN 11265



Loom VDI-4458 SmarTrack® Global  
PN 15799



Loom SmarTrack® Generic 1.4m G5 V2  
PN 16623



Cable Display SmarTrack® Global 1.5m  
PN 15315



Cable Display SmarTrack® Global 3.0m  
PN 15266



Cable Display SmarTrack® Global 5.0m  
PN 15267



Cable Display SmarTrack® Global 0.6m  
PN 15314





[rct-global.com](http://rct-global.com)

[solutions@rct-global.com](mailto:solutions@rct-global.com)